

**REMARKS**

Reconsideration of the application is respectfully requested. In view of the foregoing amendment, Claims 1 to 4, 6 to 8, 15, 56 to 57 are pending with Claim 1 being an independent claim. Claim 1 is amended, wherein the subject matter of previous claim 58 has been incorporated. As a result, claim 58 has been cancelled.

Based on the following remarks, applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

**1. Claim Objections**

With respect to the objection of Claim 8 as not further limiting the subject matter of Claim 1, Claim 8 has been cancelled. Accordingly, the rejection is moot.

**2. Claim Rejections – 35 USC § 103**

The Examiner maintains the rejection of previous claims 1 to 4, 6 to 8, 15, 56 and 57 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gray *et al.*, in view of Ozawa *et al.*, Goeddel *et al.*, Multhoff *et al.*, and Kortt *et al.*.

Without conceding their correctness, the Examiner's observations do no longer apply to the claims as amended. In particular, claim 1 has been amended without acquiescing to any of the Examiner's arguments or rejections, and without waiving the right to prosecute the amended claims (or similar claims) in the future by further defining the first binding domain of the bispecific molecule which binds cell surface membrane-bound Hsp by incorporating the subject matter of previous claim 58, which was not subject to the obviousness rejection. Applicants submit that the Examiner has not demonstrated a *prima facie* case of obviousness because the cited references, alone or in combination, do not teach all of the elements of the presently claimed invention. In particular, none of the cited references, alone or in combination, teach or suggest the claim elements of a bispecific antibody comprising V<sub>L</sub> and V<sub>H</sub> domains of monoclonal antibody cmHsp70.1 or cmHsp70.2. As such, applicants submit that Claim 1 is non-obvious.

Depended claims that depend on an independent claim that is not obvious are also not obvious. Accordingly, the claims as amended are not obvious and Applicant respectfully requests that this ground of rejection be withdrawn.

In particular, the binding domain of the claimed bispecific molecule binding to cell surface membrane-bound Hsp has been defined by reference to monoclonal antibody cmHsp70.1

and cmHsp70.2, respectively. These antibodies have been found patentable in applicant's co-pending application US serial No. 10/581,960 which matured into US Patent No. 7,700,737 B1. Since the two monoclonal antibodies are patentable and non-obvious, applicants submit that bispecific molecules for which one binding domain is defined by either of the two monoclonal antibody binding domains are also non-obvious.

Applicants further note that anti-Hsp70 antibodies cmHsp70.1 and cmHsp70.2 have been shown to specifically bind to the cell surface membrane-bound Hsp; see also Example 4 of the present application at page 50, lines 7 to 9. Therefore, the bispecific molecule of claim 1 as amended is not only not obvious because of structural features but also because of the functional features in that due to the specificity of the binding domains of cmHsp70.1 and cmHsp70.2 the bispecific molecule selectively binds Hsp and thus Bag to on the cell surface.

### **3. Claim Rejections - 35 U.S.C § 112, 1st paragraph**

The Examiner rejects Claims 58 (now incorporated into Claim 1) under 35 U.S.C. § 112, first paragraph as non-enabled because the specification allegedly does not provide evidence that the claimed biological materials are (1) known and readily available to the public; (2) reproducible from the written description. Applicants submit herewith copies of the deposit receipts showing deposit under the Budapest Treaty and an affidavit stating that the hybridomas expressing the claimed monoclonal antibodies were deposited under the provisions of the Budapest Treaty and that upon allowance of the claims all restrictions on public access to the deposited material will be removed. As such, applicants submit that the claims are enabled and respectfully request that the rejection be withdrawn.

The Examiner rejects Claims 58 (now incorporated into Claim 1) under 35 U.S.C. § 112, first paragraph as allegedly containing new matter because of the phrase "derived from monoclonal antibody cmHsp70.1...or from cmHsp70.2." Applicants submit that the rejection is moot as claim 58 has been cancelled. Furthermore, the phrase "derived from" is not recited in the amended Claim 1. In Claim 1, the bispecific molecule is defined as having a first immunoglobulin variable region comprising V<sub>L</sub> and V<sub>H</sub> domains of the antibody cmHsp70.1 or cmHsp70.2. As the Examiner has acknowledged support for such language (Office Action, pg. 11), applicants submit that the claims do not contain new matter and respectfully request that the rejection be withdrawn.

**CONCLUSION**

It is respectfully submitted that the invention as claimed fully meets all requirements and that the claims are worthy of allowance. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicant encourages the Examiner to call the undersigned collect at (608) 662-1277.

Dated: December 15, 2010

/Tanya A. Arenson/

Tanya A. Arenson  
Registration No. 47,391  
CASIMIR JONES S.C.  
2275 Deming Way, Suite 310  
Middleton, WI 53562  
Phone: (608) 662-1277